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| 09/820,965 | 03/30/2001 | Lev Brouk | GRCN001/03US | 3908 |

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| EXAMINER |
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CHANG, JULIAN

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| ART UNIT | PAPER NUMBER |
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2152

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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| 3 MONTHS | 12/28/2006 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/820,965

Applicant(s)

BROUK ET AL.

Examiner

Julian Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/10/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This Office action is responsive to communication filed on 10/10/2006. Claims 1-34 are pending, and have been rejected below.

Allowable Subject Matter

The indicated allowability of claims 1-13 is withdrawn in view of the newly discovered reference(s) to Merrick, et al (US 2005/0166209 A1), hereinafter "Merrick". Rejections based on the newly cited reference(s) follow.

Response to Amendment

Applicant's citations of the Specification clarify the meaning of the term "logical routing". It is clear from paragraphs [1088]-[1095] that both physical routing and logical routing of a message to a service can be thought of as invocations of a service. The logical routing of a message is any invocation that does not require the physical delivery of information to the invoked service.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ims, et al (US 2002/0091533 A1), hereinafter "Ims", and further in view of Merrick.

Regarding claims 1, and 13, Ims teaches a method and a computer program product comprising instructions for performing said method, said method comprising:

(a) providing a message routing network for exchanging application-level messages between a plurality of services (Fig. 4), said message routing network being built on an open platform ('platform independent', para. [0098]) overlaying a public network ('open distributed environment', para. [0098]) and managing said plurality of services, each of said services being accessible by others of said plurality of services according to properties and permissions associated with each service in said plurality of services ('the communications and security protocols to be used for electronic exchange', para. [0009]);

(b) invoking a first service among the plurality of services during a logical routing of an application-level message in said message routing network (In figure 4, the 'internalFulfillment' service is invoked locally by the 'routeOrderRequests' service.), said logical routing allowing said first service to act on said message without said message being physically delivered to said first service over said public network (Since the 'internalFulfillment' service and the 'routeOrderRequests' service are both local, there is no physical delivery of any message over the public network.), said first service invocation having a first context ([0033]); and

(c) invoking a second service among the plurality of services during said logical routing of said message in said message routing network (In figure 4, the 'internalFulfillment' service invokes the 'orderSummary' service.), said logical routing allowing said second service to act on said message without said message being physically delivered to said second service over said public network (Since both the 'internalFulfillment' service and the 'orderSummary' service are local, there is no physical delivery of the message over the public network.).

Ims fails to teach a service invocation having a context that is defined by the invoking service.

However, Merrick teaches an invoking function passing data items to an invoked function through input arguments, and thereby defining the context of the invoked function (para. [0009]; also, Fig. 7).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to employ input and output arguments to define the context of an invoked function as taught by Merrick in the e-business platform of Ims with motivation to enable the system to allow specialized functions to pass data items to each other.

Regarding claim 14, Ims teaches a system comprising:

a message routing network that enables routing of application-level messages between a plurality of services (Fig. 4), said message routing network being built on an open platform ('platform independent', para. [0098]) overlaying a public network ('open distributed environment', para. [0098]), wherein said routing is based on logical routing

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of said message that is effected through a sequence of invocations among said plurality of services ('one or more foreign processes...where such processes could reside on the local or an external partner's computing system', para. [0076]), said logical routing allowing said services to be invoked without the messages being physically delivered to one or more of the services among the plurality of services (During the invocation of local services, there is no need for physical delivery of a message. This is apparent from the local invocations present in Appendix A.3.), wherein upon return from an service invocation, said message routing network restores a message context to a context state of an invoking service of said service invocation ('control returns immediately to the service definition script processing', para. [0076]).

Ims fails to teach a service invocation having a context that is defined by the invoking service.

However, Merrick teaches an invoking function passing data items to an invoked function through input arguments, and thereby defining the context of the invoked function (para. [0009]; also, Fig. 7).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to employ input and output arguments to define the context of an invoked function as taught by Merrick in the e-business platform of Ims with motivation to enable the system to allow specialized functions to pass data items to each other.

Regarding claim 28, Ims teaches a method comprising:

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(a) invoking a first service that receives only logical delivery of an application-level message (In figure 4, the 'externalFulfillment' service is invoked locally by the 'routeOrderRequests' service.), said logical delivery allowing said first service to act on said message without said message being physically delivered to said first service (Since the 'externalFulfillment' service and the 'routeOrderRequests' service are both local, there is no physical delivery of any message over the public network.);

(b) invoking a second service (In figure 4, the 'externalFulfillment' service goes on to invoke an external service to perform external fulfillment of an order.), wherein said second service invocation is managed by a message routing network (Fig. 4) on behalf of said first service, said message routing network being built on an open platform ('platform independent', para. [0098]) overlaying a public network ('open distributed environment', para. [0098]); and

(c) delivering said message having said second context to said second service over said public network ('send to an external supplier', para. [0069]).

Ims fails to teach a service invocation having a context that is defined by the invoking service.

However, Merrick teaches an invoking function passing data items to an invoked function through input arguments, and thereby defining the context of the invoked function (para. [0009] and Fig. 7).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to employ input and output arguments to define the context of an

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invoked function as taught by Merrick in the e-business platform of Ims with motivation to enable the system to allow specialized functions to pass data items to each other.

Regarding claims 2, 16 and 30, Ims-Merrick teaches the invention substantially as claimed and described in claims 1, 14 and 28 above, including a context to an invocation includes an identity of an invoker service (Ims: Appendix A.6 'customerName').

Regarding claims 3, 17 and 31, Ims-Merrick teaches the invention substantially as claimed and described in claims 1, 14 and 28 above, including a context to an invocation includes arguments to an invoked service (Merrick: Fig. 7).

Regarding claims 4, 18 and 32, Ims-Merrick teaches the invention substantially as claimed and described in claims 1, 14 and 28 above, including a context to an invocation includes a session identifier for said message (Ims: Appendix A.8 'ordernumber').

Regarding claims 5, 19 and 33, Ims-Merrick teaches the invention substantially as claimed and described in claims 1, 14 and 28 above, including a context to an invocation includes a topic for said message (Ims: Appendix A.6 'description').

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Regarding claims 6, 20 and 34, Ims-Merrick teaches the invention substantially as claimed and described in claims 1, 1, and 28 above, including a context to an invocation includes billing responsibility for said invocation (Ims: [0013]).

Regarding claims 7 and 21, Ims-Merrick teaches the invention substantially as claimed and described in claims 1 and 14 above, including a message routing network controls at least part of an invocation ([0068-0069]).

Regarding claims 8, 15, 25 and 29, Ims-Merrick teaches the invention substantially as claimed and described in claims 1, 14 and 28 above, including a context of an invocation is included at least in part in a header element of a message (Ims: Appendix A.3, pg 29; Appendix A.5, pg 39 wherein the XML headers contains the invocation information).

Regarding claims 9 and 26, Ims-Merrick teaches the invention substantially as claimed and described in claims 1 and 14 above, including a context of an invocation is included at least in part in a body element of a message ([0068-0069]; Appendix A.5, pg 39).

Regarding claims 10 and 27, Ims-Merrick teaches the invention substantially as claimed and described in claims 1 and 14 above, including a context of an invocation is included at least in part in an attachment of a message (Ims: the XML document and scripts are part of the attachment in the message, [0016]; [0090]; [0095]).

Regarding claim 11, Ims-Merrick teaches the invention substantially as claimed and described in claim 1 above, including restoring a context, upon return from second service invocation, to a first context (Ims: 'control returns immediately to the service definition script processing', para. [0076]).

Regarding claim 12, Ims-Merrick teaches the invention substantially as claimed and described in claim 1 above, including adding a returned context from a second service invocation to the restored context (Merrick: 'pass data items to the software that invoked the function', para. [0009])

Regarding claim 22, Ims-Merrick teaches the invention substantially as claimed and described in claim 14 above, including logical routing occurs prior to a physical routing of a message (Ims: In figure 4, the invocation of the local service 'externalFulfillment', along with the logical routing, occurs prior to the invocation of an external service, and the physical routing of a message, to process the external fulfillment.).

Regarding claim 23, Ims-Merrick teaches the invention substantially as claimed and described in claim 14 above, including at least part of said logical routing occurs after initiation of a physical routing of a message (Ims: 'send element is asynchronous', para. [0076]).

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Regarding claim 24, Ims-Merrick teaches the invention substantially as claimed and described in claim 14 above, including physical routing of a message occurs at identified points during said logical routing (Ims: Appendix A.3, page 30, 'externalFulfillment').

Response to Arguments

Applicant's arguments with respect to claims 14-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Merrick, et al (US 7,028,312).

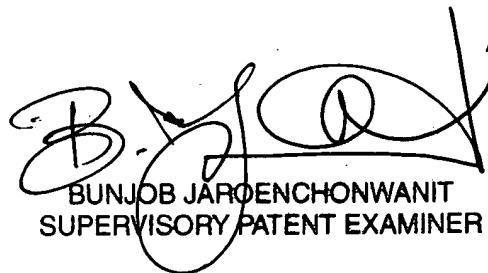
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Chang whose telephone number is (571) 272-8631. The examiner can normally be reached on Monday thru Friday 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC



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